

WHAT IS CLAIMED IS:

1. A method for accessing file system entities, comprising:
receiving a request from a node to access a file system entity having an entity name;
5 searching for an alternate entry corresponding to the file system entity, the alternate entry
comprising the entity name extended by an expandable sequence;
expanding the expandable sequence by a value corresponding to the node; and
retrieving information corresponding to the expanded sequence.

10 2. The method of claim 1, wherein the retrieved information includes a location
of the file system entity.

3. The method of claim 1, wherein the retrieved information comprises an
information node.

15 4. The method of claim 1, said retrieving comprising:
looking up the information in a system view table using the expanded sequence; and
returning the information to the node.

20 5. The method of claim 1, wherein the node comprises a process.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

6. The method of claim 1, wherein the file system entity is at least one of a file and a folder.

7. The method of claim 1, wherein the value is representative of a context of the node.

8. The method of claim 7, wherein the context is one of user identification, network interface, and time of day.

9. The method of claim 4, said searching comprising:
looking up the alternate entry in the file system view table based on a determination that the system view table is missing a first entry corresponding to the file system entity.

10. The method of claim 9, further comprising:
sending information corresponding to the first entry to the node based on a determination that the file system view table has the first entry.

11. A method for accessing file system entities, comprising:
receiving a request from a node to access a file system entity having an entity name;
determining whether a file system view table has a first entry corresponding to the file system entity;
searching the file system view table for an alternate entry based on the determination, the

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

alternate entry comprising the entity name extended by an uncommon string of characters including an expandable sequence;

expanding the expandable sequence of the alternate entry by a value corresponding to the node; and

5 retrieving information corresponding to the expanded alternate entry.

12. The method of claim 11, said retrieving comprising:

looking up the information in the file system view table using the expanded alternate entry; and

10 returning the information to the node.

13. The method of claim 11, said searching comprising:

looking up the alternate entry in the file system view table based on a determination that the system view table is missing the first entry.

15

14. The method of claim 13, further comprising:

sending information corresponding to the first entry to the node based on a determination that the file system view table has the first entry.

15. The method of claim 12, said returning comprising:

sending the information to the node based on a determination that the node is permitted access to the information; and

5 sending an error indication to the node based on a determination that the node is not permitted access to the information.

16. The method of claim 11, further comprising:

5 sending an error indication to the node based on a determination that the file system view table is missing the alternate entry.

17. The method of claim 12, further comprising:

10 sending an error indication to the node based on a determination that the file system view table is missing the information corresponding to the expanded alternate entry.

18. An apparatus for accessing file system entities, comprising:

15 a memory including an operating system that: receives a request from a node to access a file system entity having an entity name; searches for an alternate entry corresponding to the file system entity, the alternate entry comprising the entity name extended by an uncommon string of characters including an expandable sequence; expands the expandable sequence of the alternate entry by a value corresponding to the node; and retrieves information corresponding to the expanded alternate entry; and

a processor that runs the operating system.

19. An apparatus for accessing file system entities, comprising:

means for receiving a request from a node to access a file system entity having an entity

name;

means for searching for an alternate entry corresponding to the file system entity, the alternate entry comprising the entity name extended by an uncommon string of characters including an expandable sequence;

5 means for expanding the expandable sequence of the alternate entry by a value corresponding to the node; and

means for retrieving information corresponding to the expanded alternate entry.

20. The apparatus of claim 19, wherein the retrieved information includes a
10 location of the file system entity.

21. The apparatus of claim 19, wherein the retrieved information comprises an
information node.

15 22. The apparatus of claim 19, said means for retrieving comprising:
means for looking up the information in a system view table using the expanded alternate
entry; and

means for returning the information to the node.

20 23. The apparatus of claim 19, wherein the node comprises a process.

24. The apparatus of claim 19, wherein the file system entity is at least one of a

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

file and a folder.

25. The apparatus of claim 19, wherein the value is representative of a context of the node.

26. The apparatus of claim 25, wherein the context is one of user identification, network interface, and time of day.

27. The apparatus of claim 22, said means for searching comprising:
means for looking up the alternate entry in the file system view table based on a determination that the system view table is missing a first entry corresponding to the file system entity.

28. The apparatus of claim 27, further comprising:
means for sending information corresponding to the first entry to the node based on a determination that the file system view table has the first entry.

29. A computer-readable medium containing instructions for causing a computer to perform a method to facilitate access to file system entities, the method comprising:

receiving a request from a node to access a file system entity having an entity name;
searching for an alternate entry corresponding to the file system entity, the alternate entry comprising the entity name extended by an uncommon string of characters including an

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

20

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

expandable sequence;

expanding the expandable sequence of the alternate entry by a value corresponding to the node; and

retrieving information corresponding to the expanded alternate entry.

5

30. The computer-readable medium of claim 29, wherein the retrieved information includes a location of the file system entity.

10

31. The computer-readable medium of claim 29, wherein the retrieved information comprises an information node.

32. The computer-readable medium of claim 29, said retrieving comprising: looking up the information in a system view table using the expanded alternate entry; and returning the information to the node.

15

33. The computer-readable medium of claim 29, wherein the node comprises a process.

34. The computer-readable medium of claim 29, wherein the file system entity is at least one of a file and a folder.

20

35. The computer-readable medium of claim 29, wherein the value is

representative of a context of the node.

36. The computer-readable medium of claim 35, wherein the context is one of user identification, network interface, and time of day.

37. The computer-readable medium of claim 32, said searching comprising:
looking up the alternate entry in the file system view table based on a determination that the system view table is missing a first entry corresponding to the file system entity.

38. The computer-readable medium of claim 37, further comprising:
sending information corresponding to the first entry to the node based on a determination that the file system view table has the first entry.

39. A computer-readable memory device encoded with a data structure for use by an operating system in accessing file system entities, the data structure comprising:
a first entry comprising an entity name extended by an uncommon string of characters including an-expandable sequence; and
a second entry comprising the entity name extended by an uncommon string of characters including a value representative of a context of a node.

40. An apparatus for accessing file system entities, comprising:
a secondary storage comprising a plurality of file system entities, each of the file system

entities including an entity name;

a memory comprising:

an operating system including:

a file system view table including a plurality of entries;

a lookup routine operable to receive a request from a node to access a file system entity; determine whether the file system view table has a first entry corresponding to the file system entity; search the file system view table for an alternate entry based on the determination, the alternate entry comprising an entity name of the requested entity extended by an uncommon string of characters including an expandable sequence; expand the expandable sequence of the alternate entry by a value corresponding to the node; and retrieve information corresponding to the expanded alternate entry; and

a processor that runs the operating system.

41. A distributed system with a network having devices with nodes for accessing file system entities, one of the devices comprising:

a secondary storage comprising a plurality of file system entities, each of the file system entities including an entity name;

a memory comprising:

an operating system including:

a file system view table including a plurality of entries;

a lookup routine operable to receive a request from a node to access a file

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

system entity; determine whether the file system view table has a first entry corresponding to the file system entity; search the file system view table for an alternate entry based on the determination, the alternate entry comprising an entity name of the requested entity extended by an uncommon string of characters including an expandable sequence; expand the expandable sequence of the alternate entry by a value corresponding to the node; and retrieve information corresponding to the expanded alternate entry; and
a processor that runs the operating system.

42. A method for accessing file system entities, comprising:
sending, to a lookup routine, a request for access to a file system entity having an entity name, wherein the lookup routine performs a method comprising:
searching for an alternate entry corresponding to the file system entity, the alternate entry comprising the entity name extended by an uncommon string of characters including an expandable sequence;
expanding the expandable sequence of the alternate entry by a value corresponding to the node; and
retrieving information corresponding to the expanded alternate entry; and
receiving the retrieved information.

43. The method of claim 42, said retrieving comprising:
looking up the information in a system view table using the expanded alternate entry in

various permutations.

JOHN L. FARROW

FINNEGAN
HENDERSON
FARROW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com